

SEQUENCE LISTING

<110> Boylan, John  
Bowers, Alex

<120> Novel Serine Threonine Kinase Member, h2520-59

<130> 01017/36524A

<150> US 60/219,204  
<151> 2000-07-19

<160> 12

<170> PatentIn version 3.0

<210> 1  
<211> 2059  
<212> DNA  
<213> Homo sapiens

<220>

<221> CDS  
<222> (49) .. (1122)

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Thr Pro Leu Ala Ala Pro Ala Gly Ser Leu Ser Arg Lys Lys Arg Leu	
5 10 15	
gag ttg gat gac aac tta gat acc gag cgt ccc gtc cag aaa cga gct	153
Glu Leu Asp Asp Asn Leu Asp Thr Glu Arg Pro Val Gln Lys Arg Ala	
20 25 30 35	
cga agt ggg ccc cag ccc aga ctg ccc tgc ctg ttg ccc ctg agc	201
Arg Ser Gly Pro Gln Pro Arg Leu Pro Pro Cys Leu Leu Pro Leu Ser	
40 45 50	
cca cct act gct cca gat cgt gca act gct gtg gcc act gcc tcc cgt	249
Pro Pro Thr Ala Pro Asp Arg Ala Thr Ala Val Ala Thr Ala Ser Arg	
55 60 65	
ctt ggg ccc tat gtc ctc ctg gag ccc gag gag ggc ggg cgg gcc tac	297
Leu Gly Pro Tyr Val Leu Leu Glu Pro Glu Glu Gly Arg Ala Tyr	
70 75 80	
cgg gcc ctg cac tgc cct aca ggc act gag tat acc tgc aag gtg tac	345
Arg Ala Leu His Cys Pro Thr Gly Thr Glu Tyr Thr Cys Lys Val Tyr	
85 90 95	
ccc gtc cag gaa gcc ctg gcc gtg ctg gag ccc tac gcg cgg ctg ccc	393
Pro Val Gln Glu Ala Leu Ala Val Leu Glu Pro Tyr Ala Arg Leu Pro	
100 105 110 115	

ccg cac aag cat gtg gct cgg ccc act gag gtc ctg gct ggt acc cag Pro His Lys His Val Ala Arg Pro Thr Glu Val Leu Ala Gly Thr Gln 120 125 130	441
ctc ctc tac gcc ttt ttc act cgg acc cat ggg gac atg cac agc ctg Leu Leu Tyr Ala Phe Phe Thr Arg Thr His Gly Asp Met His Ser Leu 135 140 145	489
gtg cga agc cgc cac cgt atc cct gag cct gag gct gcc gtg ctc ttc Val Arg Ser Arg His Arg Ile Pro Glu Pro Glu Ala Ala Val Leu Phe 150 155 160	537
cgc cag atg gcc acc gcc ctg gcg cac tgt cac cag cac ggt ctg gtc Arg Gln Met Ala Thr Ala Leu Ala His Cys His Gln His Gly Leu Val 165 170 175	585
ctg cgt gat ctc aag ctg tgt cgc ttt gtc ttc gct gac cgt gag agg Leu Arg Asp Leu Lys Leu Cys Arg Phe Val Phe Ala Asp Arg Glu Arg 180 185 190 195	633
aag aag ctg gtg ctg gag aac ctg gag gac tcc tgc gtg ctg act ggg Lys Lys Leu Val Leu Glu Asn Leu Glu Asp Ser Cys Val Leu Thr Gly 200 205 210	681
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gtc tgg agc ctg ggc gtg gcg ctc ttc acc atg ctg gcc ggc cac tac Val Trp Ser Leu Gly Val Ala Leu Phe Thr Met Leu Ala Gly His Tyr 245 250 255	825
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ggg gcc tac gcc ttg cct gca ggc ctc tcg gcc cct gcc cgc tgt ctg Gly Ala Tyr Ala Leu Pro Ala Gly Leu Ser Ala Pro Ala Arg Cys Leu 280 285 290	921
gtt cgc tgc ctc ctt cgt cgg gag cca gct gaa cgg ctc aca gcc aca Val Arg Cys Leu Leu Arg Arg Glu Pro Ala Glu Arg Leu Thr Ala Thr 295 300 305	969
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cca acc cga tcc cat ctc tgg gag gct gcc cag gtg gtc cct gat gga Pro Thr Arg Ser His Leu Trp Glu Ala Ala Gln Val Val Pro Asp Gly 325 330 335	1065
ctg ggg ctg gac gaa gcc agg gaa gag gag gga gac aga gaa gtg gtt Leu Gly Leu Asp Glu Ala Arg Glu Glu Glu Gly Asp Arg Glu Val Val 340 345 350 355	1113

ctg tat ggc taggaccacc ctactacacg ctcagctgcc aacagtggat 1162  
Leu Tyr Gly

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<212> PRT  
<213> Homo sapiens

<400> 2

Met Arg Ala Thr Pro Leu Ala Ala Pro Ala Gly Ser Leu Ser Arg Lys  
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Lys Arg Leu Glu Leu Asp Asp Asn Leu Asp Thr Glu Arg Pro Val Gln  
20 25 30

Lys Arg Ala Arg Ser Gly Pro Gln Pro Arg Leu Pro Pro Cys Leu Leu  
35 40 45

Pro Leu Ser Pro Pro Thr Ala Pro Asp Arg Ala Thr Ala Val Ala Thr  
50 55 60

Ala Ser Arg Leu Gly Pro Tyr Val Leu Leu Glu Pro Glu Glu Gly Gly  
65 70 75 80

Arg Ala Tyr Arg Ala Leu His Cys Pro Thr Gly Thr Glu Tyr Thr Cys  
85 90 95

Lys Val Tyr Pro Val Gln Glu Ala Leu Ala Val Leu Glu Pro Tyr Ala  
100 105 110

Arg Leu Pro Pro His Lys His Val Ala Arg Pro Thr Glu Val Leu Ala  
115 120 125

Gly Thr Gln Leu Leu Tyr Ala Phe Phe Thr Arg Thr His Gly Asp Met  
130 135 140

His Ser Leu Val Arg Ser Arg His Arg Ile Pro Glu Pro Glu Ala Ala  
145 150 155 160

Val Leu Phe Arg Gln Met Ala Thr Ala Leu Ala His Cys His Gln His  
165 170 175

Gly Leu Val Leu Arg Asp Leu Lys Leu Cys Arg Phe Val Phe Ala Asp  
180 185 190

Arg Glu Arg Lys Lys Leu Val Leu Glu Asn Leu Glu Asp Ser Cys Val  
195 200 205

Leu Thr Gly Pro Asp Asp Ser Leu Trp Asp Lys His Ala Cys Pro Ala  
210 215 220

Tyr Val Gly Pro Glu Ile Leu Ser Ser Arg Ala Ser Tyr Ser Gly Lys  
225 230 235 240

Ala Ala Asp Val Trp Ser Leu Gly Val Ala Leu Phe Thr Met Leu Ala  
245 250 255

Gly His Tyr Pro Phe Gln Asp Ser Glu Pro Val Leu Leu Phe Gly Lys  
260 265 270

Ile Arg Arg Gly Ala Tyr Ala Leu Pro Ala Gly Leu Ser Ala Pro Ala  
275 280 285

Arg Cys Leu Val Arg Cys Leu Leu Arg Arg Glu Pro Ala Glu Arg Leu  
290 295 300

Thr Ala Thr Gly Ile Leu Leu His Pro Trp Leu Arg Gln Asp Pro Met  
305 310 315 320

Pro Leu Ala Pro Thr Arg Ser His Leu Trp Glu Ala Ala Gln Val Val  
325 330 335

Pro Asp Gly Leu Gly Leu Asp Glu Ala Arg Glu Glu Gly Asp Arg  
340 345 350

Glu Val Val Leu Tyr Gly  
355

<210> 3  
<211> 21  
<212> DNA  
<213> Artificial

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<223> Artificial = PCR Primer  
  
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21

<210> 4  
<211> 21  
<212> DNA  
<213> Artificial

<220>  
<223> Artificial = PCR Primer  
  
<400> 4

cgagtcctgg aagggttagt g

21

<210> 5  
<211> 11  
<212> PRT  
<213> Artificial

<220>  
<223> Artificial = PCR Primer  
  
<400> 5

Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg  
1 5 10

<210> 6  
<211> 20  
<212> DNA  
<213> Artificial

<220>  
<223> Artificial = PCR Primer  
  
<400> 6

cggggcgaga tgcgagccac

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<210> 7  
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<212> DNA  
<213> Artificial

<220>  
<223> Artificial = PCR Primer

<400> 7

agggtggtcc tagccataca 20

<210> 8  
<211> 358  
<212> PRT  
<213> Homo sapiens

<400> 8

Met Arg Ala Thr Pro Leu Ala Ala Pro Ala Gly Ser Leu Ser Arg Lys  
1 5 10 15

Lys Arg Leu Glu Leu Asp Asp Asn Leu Asp Thr Glu Arg Pro Val Gln  
20 25 30

Lys Arg Ala Arg Ser Gly Pro Gln Pro Arg Leu Pro Pro Cys Leu Leu  
35 40 45

Pro Leu Ser Pro Pro Thr Ala Pro Asp Arg Ala Thr Ala Val Ala Thr  
50 55 60

Ala Ser Arg Leu Gly Pro Tyr Val Leu Leu Glu Pro Glu Glu Gly Gly  
65 70 75 80

Arg Ala Tyr Gln Ala Leu His Cys Pro Thr Gly Thr Glu Tyr Thr Cys  
85 90 95

Lys Val Tyr Pro Val Gln Glu Ala Pro Ala Val Leu Glu Pro Tyr Ala  
100 105 110

Arg Leu Pro Pro His Lys His Val Ala Arg Pro Thr Glu Val Leu Ala  
115 120 125

Gly Thr Gln Leu Leu Tyr Ala Phe Phe Thr Arg Thr His Gly Asp Met  
130 135 140

His Ser Leu Val Arg Ser Arg His Arg Ile Pro Glu Pro Glu Ala Ala  
145 150 155 160

Val Leu Phe Arg Gln Met Ala Thr Ala Leu Ala His Cys His Gln His  
165 170 175

Gly Leu Val Leu Arg Asp Leu Lys Leu Cys Arg Phe Val Phe Ala Asp  
180 185 190

Arg Glu Arg Lys Lys Leu Val Leu Glu Asn Leu Glu Asp Ser Cys Val  
195 200 205

Leu Thr Gly Pro Asp Asp Ser Leu Trp Asp Lys His Ala Cys Pro Ala  
210 215 220

Tyr Val Gly Pro Glu Ile Leu Ser Ser Arg Ala Ser Tyr Ser Gly Lys  
225 230 235 240

Ala Ala Asp Val Trp Ser Leu Gly Val Ala Leu Phe Thr Met Leu Ala  
245 250 255

Gly His Tyr Pro Phe Gln Asp Ser Glu Pro Val Leu Leu Phe Gly Lys  
260 265 270

Ile Arg Arg Gly Ala Tyr Ala Leu Pro Ala Gly Leu Ser Ala Pro Ala  
275 280 285

Arg Cys Leu Val Arg Cys Leu Leu Arg Arg Glu Pro Ala Glu Arg Leu  
290 295 300

Thr Ala Thr Gly Ile Leu Leu His Pro Trp Leu Arg Gln Asp Pro Met  
305 310 315 320

Pro Leu Ala Pro Thr Arg Ser His Leu Trp Glu Ala Ala Gln Val Val  
325 330 335

Pro Asp Gly Leu Gly Leu Asp Glu Ala Arg Glu Glu Glu Gly Asp Arg  
340 345 350

Glu Val Val Leu Tyr Gly  
355

<210> 9

<211> 153

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Xaa = unknown or other

<400> 9

Leu Arg Phe Ala Ser Pro Gly Pro Gly Ala Gly Arg Ala Arg Asp Ser  
1 5 10 15

Gln Arg Lys Trp Arg Arg Leu Arg Ala Arg Pro Leu Leu Gly Pro Gly  
20 25 30

Gln Gly Trp Ser Trp Ala Gly Ile Pro Ser Ser Ala Ala Gln Arg  
35 40 45

Ala Gly Pro Pro Ala Gly Ala Leu Glu Ala Leu Ser Pro Gly Gly Ala  
50 55 60

Arg Ala His Ala Glu Arg Arg Gly Glu Met Arg Ala Thr Pro Leu Ala  
65 70 75 80

Ala Pro Ala Gly Ser Leu Ser Arg Lys Lys Arg Leu Glu Leu Asp Asp  
85 90 95

Asn Leu Asp Thr Glu Arg Pro Val Gln Lys Arg Ala Arg Ser Gly Pro  
100 105 110

Gln Pro Arg Leu Pro Pro Cys Leu Leu Pro Leu Ser Pro Pro Thr Ala  
115 120 125

Pro Asp Arg Ala Thr Ala Val Xaa Thr Xaa Ser Arg Xaa Xaa Xaa Tyr  
130 135 140

Val Leu Leu Glu Ala Arg Arg Xaa Ala  
145 150

<210> 10  
<211> 233  
<212> PRT  
<213> Homo sapiens

<400> 10

Gly Pro Gly Trp Tyr Pro Ala Pro Leu Arg Leu Phe His Ser Asp Pro  
1 5 10 15

Trp Gly His Ala Gln Pro Gly Ala Lys Arg His Arg Ile Pro Glu Pro  
20 25 30

Glu Ala Ala Val Leu Phe Arg Gln Met Ala Thr Ala Leu Ala His Cys  
35 40 45

His Gln His Gly Leu Val Leu Arg Asp Leu Lys Leu Cys Arg Phe Val  
50 55 60

Phe Ala Asp Arg Glu Arg Lys Lys Leu Val Leu Glu Asn Leu Glu Asp  
65 70 75 80

Ser Cys Val Leu Thr Gly Pro Asp Asp Ser Leu Trp Asp Lys His Ala  
85 90 95

Cys Pro Ala Tyr Val Gly Pro Glu Ile Leu Ser Ser Arg Ala Ser Tyr  
100 105 110

Ser Gly Lys Ala Ala Asp Val Trp Ser Leu Gly Val Ala Leu Phe Thr  
115 120 125

Met Leu Ala Gly His Tyr Pro Phe Gln Asp Ser Glu Pro Val Leu Leu  
130 135 140

Phe Gly Lys Ile Arg Arg Gly Ala Tyr Ala Leu Pro Ala Gly Leu Ser  
145 150 155 160

Ala Pro Ala Arg Cys Leu Val Arg Cys Leu Leu Arg Arg Glu Pro Ala  
165 170 175

Glu Arg Leu Thr Ala Thr Gly Ile Leu Leu His Pro Trp Leu Arg Gln  
180 185 190

Asp Pro Met Pro Leu Ala Pro Thr Arg Ser His Leu Trp Glu Ala Ala  
195 200 205

Gln Val Val Pro Asp Gly Leu Gly Leu Asp Glu Ala Arg Glu Glu Glu  
210 215 220

Gly Asp Arg Glu Val Val Leu Tyr Gly  
225 230

<210> 11  
<211> 360  
<212> PRT  
<213> Homo sapiens

<400> 11

Gly Gln Gly Trp Ser Trp Ala Gly Ile Pro Ser Ser Ala Ala Ala Gln  
1 5 10 15

Arg Ala Gly Pro Pro Ala Gly Ala Leu Glu Ala Leu Ser Pro Gly Gly  
20 25 30

Ala Arg Ala His Ala Glu Arg Arg Gly Glu Met Arg Ala Thr Pro Leu  
35 40 45

Ala Ala Pro Ala Gly Ser Leu Ser Arg Lys Lys Arg Leu Glu Leu Asp  
50 55 60

Asp Asn Leu Asp Thr Glu Arg Pro Val Gln Lys Arg Ala Arg Ser Gly  
65 70 75 80

Pro Gln Pro Arg Leu Pro Pro Cys Leu Leu Pro Leu Ser Pro Pro Thr  
85 90 95

Ala Pro Asp Arg Ala Thr Ala Val Ala Thr Ala Ser Arg Leu Gly Pro  
100 105 110

Tyr Val Leu Leu Glu Pro Glu Glu Gly Arg Ala Tyr Gln Ala Leu  
115 120 125

His Cys Pro Thr Gly Thr Glu Tyr Thr Cys Lys Val Tyr Pro Val Gln  
130 135 140

Glu Ala Leu Ala Val Leu Glu Pro Tyr Ala Arg Leu Pro Pro His Lys  
145 150 155 160

His Val Ala Arg Pro Thr Glu Val Leu Ala Gly Thr Gln Leu Leu Tyr  
165 170 175

Ala Phe Phe Thr Arg Thr His Gly Asp Met His Ser Leu Val Arg Ser  
180 185 190

Arg His Arg Ile Pro Glu Pro Glu Ala Ala Val Leu Phe Arg Gln Met  
195 200 205

Ala Thr Ala Leu Ala His Cys His Gln His Gly Leu Val Leu Arg Asp  
210 215 220

Leu Lys Leu Cys Arg Phe Val Phe Ala Asp Arg Glu Arg Lys Lys Leu  
225 230 235 240

Val Leu Glu Asn Leu Glu Asp Ser Cys Val Leu Thr Gly Pro Asp Asp  
245 250 255

Ser Leu Trp Asp Lys His Ala Cys Pro Ala Tyr Val Gly Pro Glu Ile  
260 265 270

Leu Ser Ser Arg Ala Ser Tyr Ser Gly Lys Ala Ala Asp Val Trp Ser  
275 280 285

Leu Gly Val Ala Leu Phe Thr Met Leu Ala Gly His Tyr Pro Phe Gln  
290 295 300

Asp Ser Glu Pro Val Leu Leu Phe Gly Lys Ile Arg Arg Gly Ala Tyr  
305 310 315 320

Ala Leu Pro Ala Gly Leu Ser Ala Pro Ala Arg Cys Leu Val Arg Cys  
325 330 335

Leu Leu Arg Arg Glu Pro Ala Glu Arg Leu Thr Ala Thr Gly Ile Leu  
340 345 350

Leu His Pro Trp Leu Arg Gln Asp  
355 360

<210> 12

<211> 510

<212> DNA

<213> Homo sapiens

<400> 12

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gacctgagat actcagctca cgggcctcat actcggcaa ggcagccgat gtctggagcc 180  
tggcgctggc gctcttcacc atgctggccg gccactaccc cttccaggac tcggagcctg 240  
tcctgctttt cggcaagatc cgccgcgggg cctacgcctt gcctgcaggc ctctcgccc 300  
ctgcccgcgt tctggttcgc tgcctccttc gtcggagcc agctgaacgg ctcacagcca 360  
caggcatcct cctgcacccc tggctgcgac aggacccgat gcccttagcc ccaacccgat 420  
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aagaggaggg agacagagaa gtggttctgt 510

<210> 13

<211> 25

<212> PRT

<213> Homo sapiens

<400> 13

Glu Leu Asp Asp Asn Leu Asp Thr Glu Arg Pro Val Gln Lys Arg Ala  
1 5 10 15

Arg Ser Gly Pro Gln Pro Arg Leu Cys  
20 25

<210> 14

<211> 25

<212> PRT

<213> Homo sapiens

<400> 14

Gly Pro Tyr Val Leu Leu Glu Pro Glu Glu Gly Gly Arg Ala Tyr Gln  
1 5 10 15

Ala Leu His Cys Pro Thr Gly Thr Glu  
20 25

<210> 15  
<211> 25  
<212> PRT  
<213> Homo sapiens

<400> 15

Arg Ser His Leu Trp Glu Ala Ala Gln Val Val Pro Asp Gly Leu Gly  
1 5 10 15

Leu Asp Glu Ala Arg Glu Glu Cys  
20 25

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